AIDS Brief

for sectoral planners and managers

Health Sector

The HIV/AIDS epidemic is a global crisis that demands urgent attention and committed sustained action by alliances of individuals, organisations and sectors. The AIDS Brief series has been developed to support the conceptualisation and implementation of key sectoral responses. Typically governments and ministries have been content to view the HIV/AIDS problem as one for the Ministry of Health. It is certainly the ministry whose activities are most directly affected by the epidemic, and in which its effects are most readily seen. The MoH has therefore assumed, or been given, responsibility for dealing with the epidemic. This is a recipe for disaster. The answer lies in shared responsibilities, with all sectors contributing according to their various comparative advantages. This AIDS Brief identifies those areas where the epidemic poses special challenges to the health sector and proposes actions to mitigate the impact of the epidemic on the sector.

BACKGROUND

Definition of the Health Sector

The health sector comprises government health services; private commercial facilities and practitioners, including medical paramedical and drug sellers of various kinds; private non-profit organisations and practitioners; and traditional practitioners of various backgrounds. This Brief relates primarily to the concerns and activities of the public health sector in developing countries, although it is also relevant to the other stakeholders.

Facts about the Health Sector

The provision of public health care in developing countries is typically organised into several levels, not all of which are necessarily or always present. At the lowest level are village or community health workers, who may or may not have formal training and may or may not be paid by the state. Above this are health posts or clinics staffed by formally trained workers, typically nurses and midwives. At the next level are health centres with beds, and usually doctors. The final level comprises hospitals at district, regional or referral, and specialist or tertiary level. At the lower levels of the system preventative and curative care should be integrated and it is here that the majority of patients should be accommodated. This, combined with efficient referral arrangements, is essential if the most cost-effective operation is to be achieved.

AIDS AND THE HEALTH SECTOR

Current epidemiological situation

According to UNAIDS some 5.6 million people, including 570,000 children under 15 years, were newly infected with HIV in 1999, bringing the total number of people living with HIV/AIDS to 33.6 million, including 1.2 million children. In 1999 there were an estimated 2.6 million AIDS deaths, 470,000 of them children.

More than 95% of those infected with HIV are estimated to live in the developing world. Africa, especially sub-Saharan Africa, is the epicentre of the epidemic. Africa accounts for nearly 70% of those living with HIV/AIDS world-wide, while sub-Saharan Africa accounted for nearly 70% of new infections and 80% of deaths in 1998. Nine out of 10 new infections in children in 1998 and 83% of all recorded AIDS deaths and 95% of AIDS orphans live or lived in Africa, which is home to a mere 10% of the world's population. In spite of 2 million African deaths in 1998 - 5,500 per day - there are currently 21.5 million adults and 1.2 million children living with HIV. The number and rate of deaths can only increase.

The southern part of the continent is the hardest hit. In Botswana, Namibia, Swaziland and Zimbabwe between 20 and 26% of 15 to 49 year olds are infected. One in seven new infections in 1998 is estimated to have occurred in South Africa alone, where the prevalence of infection in women of childbearing age is now estimated to be 29% nationally and 41% in some locations where the epidemic is most advanced.

Providing effective health care within resource constraints

Initially the thrust of the response to the HIV epidemic focused entirely on prevention. This was not so much out of choice as of necessity - there were no treatments available. Recently, however, treatments have become available which can retard the advance of the disease (triple therapy or HAART), or reduce markedly the chances of acquiring it in the first place (ARVs in pregnancy). Furthermore much experience has been accumulated in managing many conditions associated with early HIV infection. In the developing world however, implementation of these treatments has been slow, or in most cases non-existent. The reasons are mainly economic - many of the drugs are expensive - but include also the inability of health systems to deliver the treatments and services.

HIV and pregnancy

It is now established fact that use of ARVs in pregnancy can reduce mother to child, or vertical, transmission of HIV. Shorter and shorter courses are being shown to be effective and hence affordable. The ability of health services to deliver such an intervention is still questionable, and the

jury is still out on cost-effectiveness as the full costs of such a programme have not been documented. An additional issue is that relating to feeding practices. Some authorities advocate that ARVs in pregnancy must be combined with exclusive formula feeding to be fully effective. However, others feel that the benefits of breast-feeding - reduction in deaths from pneumonia, diarrhoea and malnutrition - are such that this policy cannot be recommended. The costs to the health service of managing these infections may be greater than the costs of caring for HIV infected children. The scientific evidence is still inconclusive, but some exists to suggest that exclusive breastfeeding poses only marginally more risk than exclusive bottle feeding.

HIV and TB

As a direct result of the HIV epidemic, health services are having to cope with an explosive rise in the number of cases of TB. The demands imposed by this further stretch already creaking systems. Community-based DOTS is hailed as the answer, but this must be backed up by adequate case finding, and diagnostic, education and supervisory services to ensure amongst other things adequate drug supplies and treatment completion. All levels of the service must be involved and, where appropriate, the private, NGO, traditional and other sectors must be included in plans.

The use of some drugs has suggested that mortality and morbidity can be reduced in selected groups: cotrimoxazole in those with HIV/TB co-infection and isoniazid to prevent TB in those HIV infected, tuberculin positive individuals exposed to TB. Further research is however needed to establish beyond doubt the place of prophylactic antibiotics in improving the outcome in patients co-infected with HIV and TB and in preventing TB in HIV infected patients.

HIV and STDs

Two major studies have been done. In Mwanza, using syndromic management to treat STDs, a 40% reduction in HIV incidence was claimed while in Rakai, using mass treatment for STDs, no effect was noted.

HIV testing

HIV testing facilities are not essential to enable treatment of those in the early stages of infection. However the availability of free, efficient testing services at local level - preferably outside health service settings - along with the provision of information about early stage treatments, may go a long way towards acceptance of HIV as a chronic medical condition. This may in turn remove some of the stigma attached to the disease and permit more effective control. Partnerships with other sectors and close liaison with communities will be required to make this feasible and effective.

Home-based care

At present the main burden of care for HIV infected patients falls on secondary and tertiary hospitals and there is evidence that this is resulting in the displacement of non-HIV patients and worsening mortality rates in those who do get admitted to hospital. The reasons for this are complex, but lie largely in the training and attitudes of primary care level staff and of communities. With insufficient knowledge about the disease itself and lack of training in the basic care required, staff collude with communities that often are still in the denial phase, and refer patients to hospital unnecessarily. This trend must be halted and reversed.

In many countries home-based care has been seen as a cost-effective way of providing for patients outside the formal health sector. Different models have been devised, some of which have been very costly, relying on expensive vehicles and salaries with little expenditure actually benefiting patients. Home-based care can be effective in terms of meeting patient needs at reduced cost, but proper assessments need to be done initially to identify these. However not enough has been done to involve communities in these programmes. What is their attitude to the idea? Are they willing to embrace their own place - as defined by the professionals - in providing care? To what extent? Communities must be involved in the process - both in the design and implementation phases.

AIDS orphans

The HIV epidemic appears to be having a major impact on children. This is made worse by the effect of the deaths of parents. Orphans are traditionally cared for by relatives, but in the face of the epidemic, these relatives may be unwilling or unable to care for the greatly increased number of orphans. Whilst not primarily a health sector problem, these children will inevitably put greater demands on health services due to, inter alia, increases in malnutrition, infections, STDs and trauma. The health sector must therefore ensure that the problem is adequately addressed.

Young people at risk

And finally, remaining with children - studies have shown that education initiatives in schools are effective in reducing risky behaviour and consequently rates of STDs and HIV. It is suggested that earlier interventions - those tested were high school pupils and school leavers - at primary school level are necessary to realise the full potential of this approach. With the health sector taking the lead, a multisectoral response involving other sectors and the community is possible.

Staffing issues

The health sector is by its nature labour intensive. HIV/AIDS is reducing the labour force's effectiveness in several ways.

Stress and burnout

Staff caring for infected patients suffer greater stress than other health workers. Causes include fear of contracting the disease from patients, social contamination (ostracism and stigma of working with affected patients), discomfort with the sexual dimensions of the disease, and a sense of professional inadequacy due to high mortality rates. Perhaps, however, the biggest cause of stress is the realisation that they share the risks that resulted in the infection of patients in the first place. They also have to cope with role expansion - having to bear responsibility and cope with situations for which they are untrained. This stress is increased when the patients are from the same community, and perhaps even friends or relatives. They may also have difficulty in dealing with patients' emotional traumas. In some cases the opposite may be true - health staff may dislike or feel a great social distance from patients or clients such as commercial sex workers or patients with STDs. They may have cultural, social or moral objections to the advice that are expected to give eg concerning the use of condoms or sexual behaviour. The scale of the epidemic also puts stress on the health support system and staff may be blamed for the resultant shortage of drugs and equipment.

Staff availability and experience

As more people in the community become ill there is a concomitant rise in illness and absence rates amongst staff. This is caused by a combination of self illness and taking time off to care for others. A further effect which will be felt more as the epidemic progresses is the loss of experienced staff and an inability to replace them, even with newer inexperienced personnel. The attractions of the sector will fall and will be made worse as opportunities in other sectors improve with generally falling worker availability.

Ethical issues

Health staff are generally still ill-equipped to deal with some of the ethical dilemmas posed by HIV. In most societies they are expected to keep HIV status confidential, yet they may find this difficult if they know of someone putting others at risk by repeatedly having unprotected sex.

There is also the difficulty of seeing non-AIDS patients being displaced, and finally there is the complex area of decisions relating to keeping or discharging terminally ill patients for whom little else can be done. Communities also do not like dying patients to be discharged. Training compels staff to do their best for each patient, yet this is incompatible with the needs of all patients and may not even be in the interests of individual patients. Health staff may face calls from relatives and colleagues - often one and the same - for heroic efforts or exceptions to usual practice in the case of dying patients.

Staff, even lower level staff, have to make decisions on resource use. Which of two patients should have the only ventilator, the elderly man in respiratory failure, or the HIV infected young woman with pneumonia?

Morbidity, mortality and absenteeism amongst staff

In some countries very high levels of HIV sero-prevalence have been recorded amongst health workers. TB is a key indicator disease for HIV infection. Studies in South Africa between 1991 and 1998 have documented a 5-fold increase in TB rates amongst staff, with 86% of those tested being HIV positive. Pilot studies in Zambia have found that mortality amongst female nurses has increased 13-fold between 1980 and 1991 to 2.67%, and appeared in 1994 to have risen to 4%. Absenteeism had also risen from 10% to 15%.

Doctors, laboratory technicians and other health workers are also heavily affected in some countries. Reports indicate that some health professionals continue to take great personal risks, feeling somehow protected by their profession and education. Others so fear HIV that they are leaving their professions or migrating to areas where the risks are lower.

Co-ordination and funding issues

Economic crises and structural adjustment policies have affected all sectors of government and society. The level of funding of health activities as well as other welfare and social services has been reduced and this may well have created conditions that simultaneously favour the spread

of the disease and reduce the ability to respond to the epidemic.

On the other hand, the HIV epidemic has engendered a world-wide mobilisation of funds and interest, which often causes problems for the health sector. The influx of new NGOs, researchers and donor agencies, each with their own priorities and objectives, wanting to do AIDS-related work can place an added burden on already stretched health sector staff. These organisations often work in isolation from, and even in competition with, each other and the government. Their priorities may not match local priorities and their objectives may not suit existing structures. Donation of funds may result in local jealousies and result in more fragmented approaches. Researchers are usually better funded then local service providers and may attract health sector staff away by offering better salaries. The efforts to comply with donor accounting and reporting procedures may exceed the value of the support and divert staff away from more immediate work.

Roles of the private and traditional sectors

Long established missions and private sector practitioners may also be perceived as competing with the government, both for patient loyalty and trained staff. Private sector practitioners may in fact be working at cross purposes, providing costly or sub-standard treatment for TB and STDs and thus facilitating their further spread and the development of drug resistance.

The traditional sector has also been active in provision of care for AIDS patients. While in many cases this has been helpful to some patients and has assisted hospitals by diverting some of the work, in other cases the promise of a cure has lured patients who could have been helped away from the standard care. In addition the private and traditional sector charge for their services, which has obvious impact on household resources. In some instances, for a variety of reasons, interventions, such as condom provision, may not be provided, thus missing a preventative opportunity.

IMPACT CHECKLIST

- ✓ Is the attendance rate at clinics and the admission rate to hospitals increasing?
- ✓ What is the morbidity profile in those admitted – are diseases related to HIV infection?
- ✓ What is the age and sex profile of admitted patients?
- ✓ Is length of stay increasing?
- ✓ Is the in-patient death rate rising?
- ✓ Are hospitals able to cope with the increasing numbers?
- ✓ Is there a plan locally, regionally, nationally to manage the increasing numbers of hospital patients?
- ✓ Is there a plan to incorporate all levels of the health care system into the response to the epidemic?
- ✓ What is the effect on staffing levels?
- ✓ What is the infection rate amongst staff?
- ✓ What are the sickness and absence rates?
- ✓ Is there a human resources plan to respond to increased staff turnover?
- ✓ Are staff adequately informed and educated to cope with the demands that will be placed on them?
- ✓ Are workplace policies in place to deal with needlestick injuries, chronic sickness and repeated absence for other reasons associated with the epidemic?
- ✓ Are medical and nursing student curricula being updated to take account of the epidemic?
- ✓ How are HIV infected people treated / regarded in the community?
- ✓ Are community groups proactive in their response?
- ✓ Are there collaborative groups locally bringing together different sectors, employers, and other community groups to respond?
- ✓ Are the informal sector, NGOs and traditional healers being involved to best advantage?
- ✓ Are national and international agencies being involved to best advantage?
- ✓ Are role models being sought and utilised?
- ✓ Are policy-makers closely linked to research groups active in AIDS work?
- ✓ What will be the role of the health sector in managing AIDS orphans?
- ✓ What is the ethical and moral role of insurance companies in paying out death and funeral benefits?
- ✓ Will the burden of paying for funerals lead to greater impoverishment and hence greater ill health?
- ✓ Is the state planning a national response? Does it have the capacity to do so and to implement its decisions?
- ✓ Is there a balance between educative and preventive efforts and efforts to care for those already ill?

SECTORAL RESPONSE

Providing effective health care within resource constraints

The time has come to review our approach and start to deal with HIV infection as a chronic medical disease – similar to diabetes, asthma and hypertension. Now that HIV positive patients can be offered something in the way of early care, there is a reason to have a test. Widespread knowledge of individual status can only help efforts aimed at prevention, and provision of treatment at an early stage will help towards acceptance of HIV infection as a chronic medical condition and thus reduce associated stigma.

Training of staff and the provision of the necessary drugs and equipment to allow for the management of HIV at the lowest possible level must take place. If necessary laws must be amended to permit the prescribing of drugs at this level. This may be facilitated by the preparation of management protocols for the common conditions.

There will come a time when hospital care *is* required. However this should be put off for as long as possible and episodes of inpatient care should be kept as short as possible. Hospitals must not become places for provision of palliative and terminal care: they cannot possible cope with the demand and it would be prohibitively expensive.

The inevitability of the AIDS epidemic following on the HIV epidemic and the inevitability of increasing numbers of deaths must be faced. Plans must be made to facilitate death at home to prevent families rushing dying patients to hospital. This is stressful on staff as well as being a waste of personal and organisational resources. Additional resources will undoubtedly be required, both to provide the extra care needed, and to maintain the care provided for other conditions.

The challenge therefore is to provide a holistic package of care that starts with primary prevention, and after diagnosis goes on to provide early treatment and secondary prevention, and ends with palliative and terminal care.

Staff issues

Stress and burnout

Proposed solutions include developing a team spirit and ethos; orientation programmes for new staff; training in coping skills, stress management, psychological aspects of dying and bereavement, peer support and sharing of feelings; and participation in decision-making.

Staff availability and experience

This is a problem for employers as a whole and needs to be addressed urgently on a very wide scale.

Ethical issues

The solution is three fold. Firstly create an environment where staff can openly talk about the issues, exchange views and decide what constitutes appropriate care. Secondly, agree on protocols for treatment of the most common conditions linked not only to the availability of drugs, but also to what treatments can be provided with the resources available. Thirdly, make even greater efforts to educate and involve communities in the decision-making process and the provision of care.

Morbidity, mortality and absenteeism amongst staff

There is still little evidence to substantiate any great risk from occupational exposure to HIV. However the risks, small though they may be, can be greatly reduced by the use of post-exposure prophylactic drugs. It is essential that all organisations make these available to health workers and produce and implement a clear policy regarding needlestick and other occupational exposures. Other solutions to the problem include the provision of specific education relating to the actual level of risk and appropriate training to cope with new demands. Reinforcement of the value of and insisting on the use of universal precautions is essential.

HIV positive staff are especially vulnerable to other infections, especially TB. There is now evidence to suggest prophylactic antibiotics may protect such staff. However more work is needed before making general recommendations.

In most countries better provisions are required to replace staff who are sick repeatedly or for a long time. In general, much more work is

needed to determine how best to cope with the high levels of infection amongst health service staff. Consideration must be given to making health service staff a special case and providing free anti-retroviral therapy.

Co-ordination and funding

Given the scale of the epidemic and the scarcity of resources, all community structures, religious bodies, private health care providers - both formal and informal - NGOs, employers and other government sectors will have to be involved and their efforts co-ordinated if success is to be assured. The solution lies in better communication. A co-ordinating council and regular meetings at all levels would help reduce duplication of effort and gaps in provision and provide an opportunity to share information and approaches.

Donor agencies must be made aware of the problems their policies create. Researchers must ensure their work is reviewed by local ethics committees and findings made available locally as soon as possible.

The roles of the private and traditional sectors

The solution again lies in better communication, to ensure that private medical practitioners are at least aware of national treatment guidelines and have a clear idea of the role they can play. The involvement of traditional healers as partners in care is feasible and should be encouraged, as they often are highly respected members of communities. Both groups are usually organised through an association or other grouping and might be willing to be brought into a dialogue about their role in treating HIV related illnesses. Training could also involve pharmacists who provide the drugs widely used in self-care.

ACTION CHECKLIST

PROBLEM	SUGGESTED SOLUTIONS	
Providing effective health care within resource constraints	■ Improved sectoral and intersectoral planning ■ Strengthening of management capacity and health systems ■ Prevention and cure as a package utilising all levels of the system appropriately ■ Education and involvement of communities ■ Provision of protocols for management of early HIV related diseases	■ Provision of known effective prophylactic treatments for HIV infected patients ■ Provision of accessible voluntary counselling and testing ■ Earlier introduction of HIV and sex education in schools ■ Implementation of appropriate home-based care including care for the terminally ill
Staff stress and burnout	■ Training in stress management ■ Training and education of PHC and hospital staff	■ Provision of staff support structures ■ Training in care of the dying
Staff availability and experience	■ Increases in resources to retain staff and improve staff conditions	■ Better HR planning ■ Increased recruitment efforts to replace absent or retired staff
Ethical issues	■ Encouragement of open discussion of all issues ■ Negotiated agreements defining standards of care	■ Participation of staff and community in decision-making
Morbidity, mortality and absenteeism amongst staff	■ Provision of staff health services ■ Provision of post-exposure prophylaxis	■ Encouragement of voluntary testing ■ Provision of anti-TB prophylaxis where appropriate
Co-ordination and funding issues	■ Increase in resources to provide care ■ Better communication and co-ordination of sectoral efforts ■ Co-ordination and prioritisation of research efforts	■ Better communication between parties ■ Identification of clear local and national priorities and communication of these to donors and researchers
The role of private and traditional sectors	■ Better communication between parties	■ Involvement in programmes

SUMMARY

Disorganisation and weakness in the health sector facilitate the spread of HIV. In spite of much effort, the seroprevalence rate is still climbing steeply. Until *communities* recognise and accept that the solution lies with them, the health sector can only watch and record the tide advancing. Education must therefore still play a major role in the sectoral response. This however must be supplemented by a determination to improve and strengthen health systems so they are able to provide those treatments which are now available and which are, in many cases, affordable. Continued support, with better co-ordination of research efforts is essential to provide answers to outstanding questions. Non-public providers of health care must be fully involved in the response, and finally the health sector must take the lead in ensuring that all sectors are involved and are planning an adequate response, and that this is co-ordinated at the highest level.

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Useful contacts

UNAIDS website: http://www.unaids.org

Centers for Disease Control website: http://www.cdc.gov.us

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